

2.3 Explore

Observing Cells

Name _____

Hour _____ Date _____

Read p. 27.

What are the three main parts of cell theory?

1.

2.

3.



Draw an animal cell in the space below. Label each of the following organelles and parts and describe their functions: Nucleus, chromosomes, cell membrane, vacuole, mitochondria, cytoplasm

Draw a plant cell in the space below. Label each of the following organelles and parts and describe their functions: Nucleus, chromosomes, cell membrane, vacuole, mitochondria, cytoplasm, cell wall, chloroplast

Put a circle around the names of the parts found in both plant and animal cells. Put a star next to the names of the parts found only in the plant cell.

What can a plant cell do that an animal cell cannot?

What structure carries out this function?

Stop and Think

1. Describe in words the animal cells you looked at.
2. Describe in words the plant cells you looked at:
 - a. without the iodine stain.
 - b. with the iodine stain.
3. Why do you think you used the iodine stain? What effect did it have on the cells?
4. Which cell parts were *easy to see* and which parts were *difficult or impossible to see* in
 - a. the animal cell?
Easy: _____ Difficult/impossible: _____
 - b. the plant cell?
Easy: _____ Difficult/impossible: _____
5. Which cell parts looked similar in all the cells you observed?
6. Which cell parts looked different in all the cells you observed?
7. What parts did you observe in both animal and plant cells?
8. What differences between the animal and the plant cells did you observe?



What's the Point?

Why is it important to know about the structure and functions of cells?

